RAIN-FALL.

The total quantity of rain during the month, as deduced from the reports of the several geographical sections, is given in the accompanying table on Map No. 4. In the Middle Atlantic States and in Minnesota there has been a decided excess over the mean rain-fall as calculated from observations of previous years; while there has been about the usual amount in the South Atlantic and Eastern Gulf States; in the remaining districts there has been a deficiency. In the table referred to the quantity of rain given has been deduced by taking the general average of the reported rain-fall from the several stations in each district. The general distribution of the rain-fall, as deduced from the reports received at this office and presented in the table above referred to, is graphically represented on Map No. 4.

TEMPERATURE.

In New England, the Middle States and thence westward over the Lower Lake region and adjoining States the mean temperature has been from two to five degrees below the normal, and about three degrees above the normal in the Upper Lake region, the upper Mississippi and lower Missouri valleys, but in the districts last named the temperature has been lower than reported for August, 1872. The results of the observations for the month are given in the accompanying table, in which is noted the comparison of the temperature of the several districts, with the mean temperature deduced from observations of previous years. The isothermal lines for the month, given on Map No. 3, indicate the general distribution of temperature throughout the United States.

RIVER AND OCEAN TEMPERATURES.

The number of stations supplied with the necessary apparatus for determining the temperature of water has been greatly increased, and the observations which were commenced during July have been continued and promise to be of general meteorological interest.

The table given on Map No. 3, presents a general synopsis of these observations. The temperature noted is that of the lowest stratum of water at the place of observation.

RIVER OBSERVATIONS.

In general these observations show that the rivers draining the eastern slope of the Rocky Mountains, were steadily falling during the entire month; and that those draining the western slope of the Appalachian range, experienced fluctuations attending the rains of these districts. The table on map No. 3, presents these observations in a consolidated form.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

Brig. Gen. (Bvt. Assgd.,) Chief Signal Officer, U. S. A.

albert Myer

Copy furnished for

73 Oct Oct